How is Staffing Related to Nurses' Job Satisfaction?

MAJ Christine Kramer

Winn Army Community Hospital

Acknowledgements

- National Database of Nursing Quality Indicators
- American Nurses Association

Purpose

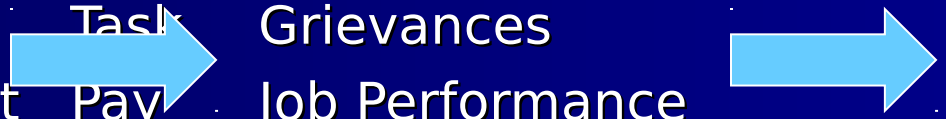
- To examine the impact of staffing and skill mix on job satisfaction of nurses employed on Medical-Surgical, Step-Down, and Critical Care Units.

Significance

- Job satisfaction has been linked to:
  - Absenteeism
  - Grievances
  - Job Performance
  - Organizational Performance
  - Patient Satisfaction
  - Staff Turnover

Conceptual Framework

Antecedents	Defining Characteristics	Consequences
Staffing	Job Enjoyment	Absenteeism
Skill Mix	Task	Grievances
Nursing Unit	Pay	Job Performance
Organizational Policies		Organizational -
Autonomy		Performance
Professional Status		Patient -
RN/MD Interaction		Satisfaction
RN/RN Interaction		Staff Turnover



Hypotheses

1. Job Satisfaction will be associated with nurses' education credentials.

2. Nurses who work on critical care units will be more satisfied than nurses who work medical-surgical or step-down units.

3. Nurses who work on units with a higher ratio of nursing hours per patient day will be more satisfied.

Hypotheses

4. Nurses who work on units with a higher percentage of nursing hours provided by RNs will be more satisfied.

5. Nurses who work on units with both higher nursing hours per patient day and a higher percentage of nursing hours provided by RNs will be more satisfied.

Sample and Setting

- **Job Enjoyment**
  - 1462 RNs
  - 24 U.S. Hospitals
- **Index of Work Satisfaction**
  - 662 RNs
  - 10 U.S. Hospitals
- **Overall Response Rate 38%**

NDNQI Adapted Instruments

- Job Enjoyment
  - General Measure of Job Satisfaction
  - 7 items

- “Nurses on my unit would say that they feel that each day on the job will never end.”

NDNQI Adapted Instruments

- Index of Work Satisfaction
- 41 Items
- 7 Subscales
  - Task
  - RN/RN Interactions
  - RN/MD Interactions
  - Decision Making
  - Autonomy
  - Professional Status
  - Pay

Data Collection

- NDNQI participating hospitals
- Standardized instrument packets
- Returned via mail
- Staffing & Skill Mix Data collected monthly, reported quarterly

Data Analysis

- Significance level $\leq .01$
  - All analyses
- Principal Component Analysis
  - Job Enjoyment
- Coefficient Alpha
  - Job Enjoyment
  - Index of Work Satisfaction

Data Analysis

- Pearson’s Correlation
- ANOVA
- Comparison of individual and unit level findings

Results: Sample Characteristics

- Job Enjoyment
  - 714 Medical Surgical Nurses
  - 204 Step-Down Nurses
  - 544 Critical Care Nurses
  - RNs >5 years experience
  - 50.4% BS Degree
- Index of Work Satisfaction
  - 297 Medical-Surgical Nurses
  - 116 Step-Down Nurses
  - 249 Critical Care Nurses

Factor Analysis

- Job Enjoyment
  - 1 Factor, 53% explained variance
  - Cronbach’ s Alpha = .86
- Index of Work Satisfaction
  - 7 Factors, 52% explained variance
  - Cronbach’s Alpha = .71 - .88

Mean Satisfaction Scores for Critical Care, Medical-Surgical, and Step-Down Nurses

- *Job Enjoyment*= 2.34 - 2.42

- *Index of Work Satisfaction*= 2.46 - 4.70

Job Satisfaction and Education Credentials

- Step–Down Nurses with BS degree or higher are more satisfied with *Pay*

  r=.241, p=.007

- No other significant correlations

Critical Care Nurses are more satisfied than other nurses

- Conflicting Findings
  - Critical Care Nurses more satisfied with *Task* (M=2.85) than Medical Surgical Nurses (M=2.53)
  - Medical Surgical Nurses more satisfied with Pay (M=2.93) than Critical Care Nurses (M=2.46)

Higher ratio of nursing hours per patient day

- Step-Down Nurses
  - No significant associations
- Critical Care Nurses
  - Small negative correlations
    - Job Enjoyment
    - Autonomy
    - Decision Making
    - RN/MD Interactions

Higher ratio of nursing hours per patient day

- Medical-Surgical Nurses
  - Small positive correlation
    - Job Enjoyment
  - Small negative correlations
    - Pay
    - Decision Making
    - RN/MD Interactions

Comparison of individual and unit level findings

- Confirmed inverse relationship with *Pay*

- Unit level relationship stronger

  $r = -.52$, $p = .003$

  versus

  $r = -.32$, $p = .001$

Higher satisfaction with more RN hours

- Step-Down Nurses
  - Small negative correlation
    - *Job Enjoyment*
    - *Decision-Making*
- Critical Care Nurses
  - Small negative correlation
    - *Pay*

Higher satisfaction with more RN hours

- Medical-Surgical Nurses
  - Small positive correlations
    - *Job Enjoyment*
    - *Decision-Making*
    - *Task*
  - Moderate positive correlation
    - *Pay*

Comparison of individual and unit level findings

- Unit level relationships stronger
  - *Pay*
    - $r = .55$. $p = .001$

      versus
    - $r = .42$, $p < .001$
  - *Job Enjoyment*
    - $r = .29$. $p = .007$

      versus
    - $r = .17$, $p < .001$

Higher Nursing Hours, Higher RNs, Higher Satisfaction

- Nurses assigned to groups:
  - Group 1 : Low Nursing Hours, Low RN
  - Group 2 : Low Nursing Hours, High RN
  - Group 3 : High Nursing Hours, Low RN
  - Group 4 : High Nursing Hours, High RN

Higher Nursing Hours, Higher RNs, Higher Satisfaction

- Critical Care Nurses
  - Group 2 (Low Hours/High RN) scored higher on *Job Enjoyment* than Group 3 (High Hours/Low RN)

Higher Nursing Hours, Higher RNs, Higher Satisfaction

- Medical Surgical Nurses
  - *Job Enjoyment*
    - Group 3 (High Hours/ Low RN) more satisfied
    - Nursing hours more important than RN hours
  - *Pay*
    - Groups 2 (Low Hours/ High RN) and 4 (High Hours/High RN) no difference
    - Group 2 more satisfied than other Groups
    - RN hours more important than nursing hours

Discussion and Implications

- Correlations expected in same direction for both Job Satisfaction Scales

- Step-Down Nurses, *Pay*, and Education
  - Less experienced as RNs and on units and may have lower expectations

Medical Surgical Nurses more satisfied with *Pay*

- Higher nursing hours and a higher percentage of RNs
- *Pay* related to “equal pay for equal work”
- Pay differential related to level of education

Critical Care Nurses more satisfied with *Task*

- Critical Care Nurses and *Task*
  - *Task* “enough time to do the work” and “opportunity to consult with colleagues”
  - Job Redesign
    - Increasing RNs
    - Increasing time and opportunity to consult with colleagues

Unexpected negative associations with staffing variables

- Critical Care and Medical-Surgical Nurses similar responses to increased nursing hours

- Negative associations represent influence of other factors besides staffing

Military Nursing Implications

- More RNs versus More Nursing Staff
- Work Redesign
- Increase Pay???

Summary

- Step Down Nurses with a BS degree or higher more satisfied with *Pay*
- Critical Care Nurses more satisfied with *Task*
- Medical-Surgical Nurses more satisfid with *Pay*
- Higher satisfaction was consistent with a higher percentage of RN hours for Medical Surgical Nurses

Summary

- Negative associations between staffing variables and Critical Care and Step-Down Nurses occur with components more likely to be affected by other factors
- Overall, high percentage of RN nursing hours associated with increased satisfaction with *Pay*, *Task*, and *Job Enjoyment*

Questions